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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,042	03/22/2004	Lawrence J. Malone	QUO1P003	4076
20350	7590	01/13/2005	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			JACKSON, BLANE J	
			ART UNIT	PAPER NUMBER
			2685	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/807,042	Applicant(s) MALONE ET AL.	
	Examiner Blane J Jackson	Art Unit 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trompower (U.S. Patent 6,132,306) with a view to Stockhusen (Patent Application Publication (US 2002/0132636 A1)).

As to claims 1, 2 and 18, Trompower teaches a single transceiver system for utilizing a plurality of different communication *parameters* comprising:

A single transceiver (system summary: column 25 line 65 to column 26, line 24, figure 3C, wireless base station with single transceiver driven by a single microcontroller (350) with transmit/ receive parameter control, column 18, lines 18-56),

Wherein the single transceiver utilizes a plurality of different communication parameters (transmit: figure 7B, column 27, line 50 to column 28, line 41, receive: figure 8B, column 29, line 25 to column 30, line 10, column 25, line 65 to column 26, line 8).

Trompower teaches a wireless system communicating with data packets where the base and mobile stations have the ability to dynamically alter *communication parameters* such as modulation complexity and PN code length but does not clearly teach the ability to use different *communication standards*.

Stockhusen teaches a multi-mode multi-band mobile telephone comprising a single transceiver driven by one of three or more chipsets to provide three or more interface standards such as GSM, TDMA or DECT for wireless communication (figures 1A and 1B, paragraphs 17-21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the concept of the communication parameters of Trompower to the communication standards of Stockhusen to support enhanced communications but in different wireless operating systems.

As to claims 3 and 4, Trompower teaches the single transceiver demodulates the signals into information bits that are buffered (figure 3C, column 10, lines 40-54).

As to claims 5-7, Trompower modified teaches the single transceiver re-modulates the information bits into signals utilizing a second communication standard (Trompower: same transceiver having modifiable transmission parameters and used to operate the transmit and receive on different channels or other transmission parameters, column 31, line 51 to column 32, line 7).

As to claim 8, Trompower teaches the single transceiver is coupled to an antenna sub-system capable of communicating utilizing the plurality of different communication standards (column 29, lines 25-27 or column 18, lines 18-38).

As to claims 9-11, Stockhusen of Trompower modified teaches a single transceiver is coupled to a plurality of baseband sub-systems each capable of processing one of the communication standards (figures 1A (112), (114) standards on different chipsets (processors) and figure 1B (116) with standards on the same chipset, paragraphs 17-19).

As to claim 12, Trompower teaches at least one of a time and duration of access to the single transceiver by the baseband sub-systems is tracked (system is aware of which parameter, such as modulation selection, and transmit/ receive duration due to antenna switching, figure 3B and C, column 10, line 40 to column 11, line 65).

As to claim 13, Stockhusen of Trompower modified teaches each of the baseband sub-systems access the single transceiver during assigned time intervals (potentially various TDMA based protocols, paragraphs 17 and 21).

As to claim 14, Stockhusen of Trompower modified (paragraph 17) and Trompower (column 21, lines 9-14) teaches each of the baseband sub-systems share memory.

As to claim 15, Trompower teaches the baseband sub-systems optimize a frequency or duration of transmissions or receptions in order to at least one of minimize a radio utilization, minimize a spectrum utilization, maximize a link throughput and

optimize a system parameter (optimize a system parameter to maximize throughput, column 25, line 65 to column 26, line 24 and column 27, lines 50-53).

As to claim 16, Stockhusen of Trompower modified teaches the baseband sub-systems at least one of translate code, and decode information bits so as to make the information bits compatible with the plurality of different communication standards (the chipsets supporting the different standards communicate data, paragraph 19).

As to claim 17, Trompower teaches a method for utilizing a single transceiver comprising:

Receiving signals utilizing a first *communication parameter* (figures 3B – mobile terminal or figure 3C wireless basestation, a single transceiver, column 9, line 9 to column 10, line 38),

Demodulating the signals into information bits (figure 3C, demodulators (362A and B), data packet format: column 10, lines 40-54),

Re-modulating the information bits into signals utilizing a second *communication parameter* (modulators (366A and B)),

Transmitting the signals utilizing the second communication parameter (figure 3C, utilize different communication parameters for the single transmit and receive circuits, column 31, line 51 to column 32, line 7),

Wherein the receiving and the transmitting are carried out utilizing a single transceiver.

Trompower teaches a wireless system communicating with data packets where the base and mobile stations have the ability to dynamically alter *communication parameters* such as modulation complexity and PN code length but does not clearly teach the ability to use different *communication standards*.

Stockhusen teaches a system for controlling a multi-mode multi-band mobile telephone that uses a variety of techniques to select one of three or more interface standards such as GSM, TDMA or DECT to communicate (figure 1B, paragraphs 18-21).

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the concept of the communication parameters of Trompower with the communication standards of Stockhusen to support enhanced communications in different operating systems.

As to claim 19, Trompower teaches a communication network includes wireless and wired communication elements (figure 2, WAN or LAN type cellular communications, column 8, lines 25-64).

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hasty, Jr. (US 2003/0157951 A1) discloses an AD-HOC channel bridge for delivery of alternate 802.11 data channels. Habetha (US 2003/0125066 A1) discloses a network with adaptation of the modulation method and bridges in an AD-

HOC network. Ivanov et al. (U.S. 2004/0266340 A1) discloses a cellular system utilizing a mobile repeater. Leslie et al. (U.S. Patent 6,404,775) discloses a cellular repeater with band or protocol standard conversion. Luebke et al. (US 2004/0235468 A1) discloses a wireless communication network including access points with two transceivers for bridging a first and second network. Palmer et al. (U.S. 6,295,461) discloses a multi mode radio frequency network with synchronization signals to control time periods on narrow band or wide band communication signals. Lescuyer et al. (US 2004/0147262 A1) discloses a multi-mode mobile telephone system. Corrigan, III et al. (U.S. 6,697,345) discloses a multi transport mode radio communication system, multiple modes inserted into one transmit/receive protocol, with synchronous and asynchronous capability.

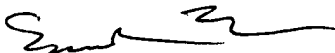
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J Jackson whose telephone number is (703) 305-5291. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703) 305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2685

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJJ


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